#### REMARKS

Claims 1 through 20 are pending in the Application.

Claims 1 through 3, 6, 7, 9 through 11 and 14 through 20 have rejected by the Examiner.

Claims 4, 5, 8, 12 and 13 have been objected to by the Examiner.

Claims 1, 4, 5, 8, 9, 12, 13 and 17 have been amended by Applicant.

### Discussion of the claim objections.

Claims 4, 5, 8, 12 and 13 have been objected to as being dependent upon a rejected base claim. Examiner has indicated these would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant has so amended claims 4, 5, 8, 12 and 13 to be in independent form including all of the limitations of the base claim and any intervening claims.

### Discussion of the claim rejections

Examiner has rejected claims 1 through 3, 7, 9 through 11 and 15 through 20 under 35 U.S.C. § 102 (b) as being anticipated by USPAN 2003/0034985 (Needham Riddle). Examiner has rejected claims 6 and 14 under 35 U.S.C. § 103 (a) as being unpatentable over Needham Riddle in view of USPN 6,753,661 (Muthu).

Applicant has amended the claims to overcome the rejections. Applicant respectfully traverses the rejections as to the claims as amended. Below Applicant sets out subject matter in each of the rejected independent claims not disclosed or suggested by the cited art. On this basis, Applicant believes all the pending claims are allowable.

## Discussion of Independent claim 1

Claim 1 sets out a lighting system that includes a mixing cavity that mixes light, an optical cable attached to the mixing cavity and a color sensor attached to the optical cable. The color sensor sampling light from within the mixing cavity via the optical cable. The color sensor includes a plurality of photo sensors. Each photo sensor from the plurality of photo sensors has an integrated color filter. The color sensor generates for each photo sensor an output signal with a voltage based on filtered light incident upon the photo sensor, This combination is not disclosed or suggested by the cited art.

Needham Riddle discloses a fiber-optic pickup used in combination with a spectrometer. See paragraph [0058]. However, when photo sensors are used to monitor light within a mixing cavity, both Needham Riddle and Muthu teach the conventional method of placing the photo sensors within the mixing cavity. Neither Needham Riddle nor Muthu disclose or suggest using an optical cable to transport light from a mixing cavity to a photo sensor

comprising a plurality of photo sensors with integrated color filters, as set out in claim 1 of the present case.

### Discussion of Independent claim 9

Claim 9 sets out a lighting system that includes a mixing means, a sensor means and a cable means. The sensor means comprises a plurality of photo sensors. Each photo sensor from the plurality of photo sensors has an integrated color filter. The sensor means generates for each photo sensor an output signal with a voltage based on filtered light incident upon the photo sensor. This combination is not disclosed or suggested by the cited art.

Needham Riddle discloses a fiber-optic pickup used in combination with a spectrometer. See paragraph [0058]. However, when photo sensors are used to monitor light within a mixing cavity, both Needham Riddle and Muthu teach the conventional method of placing the photo sensors within the mixing cavity. Neither Needham Riddle nor Muthu disclose or suggest using an cable means for transporting light from a mixing means to a sensor means comprising a plurality of photo sensors with integrated color filters, as set out in claim 9 of the present case.

### Discussion of Independent claim 17

Claim 17 sets a out a method that includes mixing light within a mixing cavity. The light is transported from the mixing cavity, through an optical cable, to a color sensor. The transported light is sampled by the color sensor. The

color sensor comprises a plurality of photo sensors. Each photo sensor from the plurality of photo sensors has an integrated color filter. The color sensor generates for each photo sensor an output signal with a voltage based on filtered light incident upon the photo sensor. This combination is not disclosed or suggested by the cited art.

Needham Riddle discloses a fiber-optic pickup used in combination with a spectrometer. See paragraph [0058]. However, when photo sensors are used to monitor light within a mixing cavity, both Needham Riddle and Muthu teach the conventional method of placing the photo sensors within the mixing cavity. Neither Needham Riddle nor Muthu disclose or suggest using an cable means for transporting light from a mixing means to a sensor means comprising a plurality of photo sensors with integrated color filters, as set out in claim 17 of the present case.

# Conclusion

Applicant believes this Amendment has placed the present application in condition for allowance and favorable action is respectfully requested.

Respectfully submitted, YIN LEONG KWONG CHOON GUAN KO CHUN HEAN CHEAH

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